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September 4, 1997

SEP - 4 1997

Mr. William F. Caton, Acting Secretary Federal Communications Commission 1919 M. St., NW, Room 222 Washington, D.C. 20554

RE:

Ex Parte Presentation - Proxy Cost Models

CC Docket No. 97-160 - Forward-Looking Mechanism for High Cost

Support for Non-Rural LECs

Dear Mr. Caton,

AT&T and MCI are pleased to submit a new CD-ROM that contains the USF Calculator for the Hatfield Model for the Commission and the Federal-State Joint Board's consideration in CC Docket Nos. 96-45 and 97-160. The USF Calculator allows the user to perform roll-up calculations of USF costs under a wide variety of scenarios. Documentation of this feature is attached, along with a copy of the CD-ROM's README.txt file.

In addition to the USF Calculator, the CD-ROM contains a reissue of the Hatfield Model 4.0 that was submitted to the Commission on August 4, 1997. Although no changes have been made in the model's logic, the model's spreadsheets now contain a larger number of text annotations explaining the functions performed in each cell.

Two copies of this Notice are being submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's rules. Copies of the CD-ROM are being filed with the Secretary and with ITS.

Sincerely,

Richard N. Clarke

Government Affairs Director

R. M. Clarkethees

Attachments and CD-ROM

cc:

C. Keller

R. Loube

B. Clopton

E. Hoffnar

B. Sharkey

A. Bush

M. Kennet

State Service List

No. of Copies rac'd

#### README.txt FILE on CD\_ROM

The compressed executable file for the Hatfield Model 4.0 contained on this CD (HM40Setup.exe) is identical to the equivalent file contained on the previous (08/01/97) CD release. The only difference is that the Distribution, Feeder, and Switching and Interoffice program modules contain additional "red dot" annotations to explain the function of each cell of the Excel workbooks. There have been no changes made in the model logic. For the convenience of users who do not wish to reinstall the Hatfield Model to examine these annotated program modules, an additional directory called ANNOTATED MODULES has been added to this CD that contains a copy of these annotated modules for direct examination.

The RUNS\_RBOC directory contains a corrected Ohio Bell density zone expense module (OHAM\_dz.xls) to replace the incorrect file that was included in the RUNS\_RBOC directory of the previous (08/01/97) CD release.

This CD contains a new directory, USF\_CALCULATOR, containing two Microsoft Access database files. One of the database files (40USF\_CALC\_1001.mdb) provides a quick method of computing rolled-up USF costs based on the Hatfield Default cost of capital of 10.01%. The second database file (40USF\_CALC\_1125.mdb) computes rolled-up USF costs at the FCC's 1990 reference cost of capital of 11.25%. More complete documentation of these USF Calculators and their operation is contained in the 40USF\_CALC\_UserGuide.doc file that is contained both in the DOCUMENTATION directory of the CD as well as in the USF\_CALCULATOR directory.

## HATFIELD MODEL Release 4.0

# UNIVERSAL SERVICE FUND CALCULATOR

**User's Guide** 

September 2, 1997

This document describes the Universal Service Fund (USF) Calculator for the Hatfield Model, Release 4.0 (HM).

The USF Calculator uses the HM's calculation of the cost of basic local service (computed at a CBG-by-CBG level) to determine the total amounts of annual universal service support that would be required to fund the difference between this calculated cost of basic local service and a given set of benchmark cost thresholds. The user may choose to have this support calculation based on any of the following three aggregation methodologies.

- 1. *CBG method:* basic local service costs are calculated for each line type for each CBG, and the difference taken between these basic service costs and selected benchmark threshold for each line type.
- 2. Wire Center method: basic local service costs are calculated for each line type for each CBG served by a given wire center, then a weighted average basic local service cost for that line type in that wire center is calculated by weighting each CBG's basic local service costs for that line type by that CBG's share of the supported line type served by the wire center. The USF requirement for the line type in that wire center is then computed by taking the difference taken between its average basic local service cost and its selected benchmark threshold.
- 3. **Density Zone method:** basic local service costs are calculated for each line type in each CBG in a given density zone, then a weighted average basic local service cost for that line type in that density zone is calculated by weighting each CBG's basic local service costs for that line type by that CBG's share of the supported line type served in the entire density zone.<sup>2</sup> The USF requirement for the density zone is then computed by taking the

<sup>&</sup>lt;sup>1</sup> Because this methodology computes an average monthly cost for each line type in a wire center by weighting the costs of that line type in each of the wire center's CBGs by its relative number of lines of that type, this methodology will yield an of average monthly cost for that wire center that differs slightly from the estimate computed in the Wire Center Expense Module that weights individual CBG costs by relative total lines.

<sup>&</sup>lt;sup>2</sup> This bottoms up methodology will cause USF estimates to differ slightly from what may be computed directly by the Density Zone Expense Module.

difference taken between its average basic local service cost and its selected benchmark threshold.

Using any of these three methods, the user has a choice of:

- what line types (primary residence, secondary residence, single line business, multiline business and public) are to be eligible for support
- the cost benchmark threshold for each of these line types
- whether the Calculator should compute the annual USF support cost for an individual study area, all of the study areas in a given state, all of the study areas in the country that exceed 100,000 lines, or all of the study areas in the country regardless of size.

Two USF Calculators have been provided. One (40USF\_CALC\_1001.mdb) uses basic local service costs that are computed at the Hatfield Model's default weighted average cost of capital (WACC) of 10.01%.<sup>3</sup> A second Calculator (40USF\_CALC\_1125.mdb) is also provided to satisfy the Commission's request to examine USF support costs based on a reference rate of return of 11.25%.<sup>4</sup> Each of these WACCs assumes that the LEC's capital structure consists of 45% debt and 55% equity. The WACC of 10.01% assumes a cost of equity of 11.9% and a cost of debt of 7.7%. The WACC of 11.25% assumes a cost of equity of 13.25% and a cost of debt of 8.8%.

To operate the USF Calculator, the Microsoft Access Version 7.0 database manager program must be available on the user's computer. Upon opening the selected Calculator under Microsoft Access, the Main Menu of the Calculator will

<sup>&</sup>lt;sup>3</sup> A WACC of 10.01% is consistent with what the current cost of capital for the major LECs. Because this WACC has been computed using data current as of 12/31/97, and using forword-looking discounted cash flow (DCF) and capital asset pricing model (CAPM) methodologies, it represents the best economic view as to the LECs' forward-looking WACC.

<sup>&</sup>lt;sup>4</sup> As indicated above, a rate of return of 11.25% exceeds significantly the current forward-looking WACC of the incumbent LECs. While the Commission found 11.25% to be these LECs' WACC in CC Docket No. 89-624 (adopted, September 19, 1990), economy-wide reductions in interest rates and costs of equity over the intervening seven years have made this figure both excessive and obsolete.

automatically launch. This Main Menu provides the user with the option to select any of the three calculation methods (CBG, Wire Center, or Density Zone).

Once a calculation method has been selected. The next screen permits the user to determine which types of lines should be eligible to receive universal service support. To do this, the user must then enter a benchmark cost threshold for each of the five line types:

- Primary Residence
- Secondary Residence
- Single Line Business
- Multiline Business
- Public Lines

If the benchmark cost threshold field for any particular line type is left blank, then lines of this type will receive no universal service support, regardless of their cost. If \$0.00 is entered as the benchmark cost threshold, the Calculator will return the total annual cost of basic local service for the line type.<sup>5</sup>

The final step to execute a run of the USF Calculator is to select whether the cost of USF support should be calculated for a:

- National Run (all U.S. study areas)
- All Companies Over 100K Switched Lines Run (all U.S. study areas over 100,00 lines)
- State Run (all study areas in a particular state)
- Company Specific Run (a particular study area)

Making this selection requires the following:

- National Run: click on the "RUN" button next to the "National Run" caption.
- All Companies Over 100K Switched Lines Run: click on the "RUN" button next to the "All Companies Over 100K Switched Lines Run" caption.

<sup>&</sup>lt;sup>5</sup> If this figure is divided by the number of lines of that line type, an average annual perline cost of basic local service can be derived.

- State Run: double-click on the desired state.
- Company Specific Run: double-click on the desired study area.

The above action will generate a report in Print Preview mode. This report will display the USF annual support.

You have three options:

- View pages
- Print Pages (Ctrl-P or Toolbar)
- Export report to an external file (Select Save As/Export)
  To save as an Excel file, select external file and Excel type.<sup>6</sup>
- Analyze with Excel (use button on Toolbar)<sup>7</sup>

To return to main menu, depress the "Close" button while in preview mode.

The "Main Menu" button in the lower left hand corner of each calculation screen will return the user to the Main Menu to select a new calculation method.

<sup>&</sup>lt;sup>6</sup> Certain parmeters need to be set in Access for this feature to work properly.

<sup>&</sup>lt;sup>7</sup> Certain parmeters need to be set in Access for this feature to work properly.

#### DOCUMENT OFF-LINE

This page has been substituted for one of the following:

o An oversize page or document (such as a map) which was too large to be scanned into the RIPS system.

o Microfilm, microform, certain photographs or videotape.

Other materials which, for one reason or another, could not be scanned into the RIPS system.

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